

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### **REGION IX**

### 75 Hawthorne Street San Francisco, CA 94105-3901

OCT 2 9 2018

Dr. Matt Miyasato, Deputy Executive Officer Science and Technology Advancement South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, California 91765-4178

Dear Dr. Miyasato:

Thank you for your submission of the South Coast Air Quality Management District (SCAQMD) 2018 Annual Air Quality Monitoring Network Plan on June 28, 2018. We have reviewed the submitted document based on the requirements set forth in 40 CFR Part 58. Based on the information provided in the plan, the U.S. Environmental Protection Agency (EPA) approves all portions of the network plan except those specifically identified below. With this plan approval, we also formally approve an FEM waiver for the following sites, for the time periods specified in enclosure B to this letter: Anaheim (AQS ID: 06-059-0007-3), Central Los Angeles (AQS ID 06-037-1103-9), South Long Beach (AQS ID: 06-037-4004-3), Rubidoux (AQS ID: 06-065-8001-9), Mira Loma (AQS ID: 06-065-8005-3), Long Beach Route 710 (AQS ID: 06-037-4008), and Ontario Route 60 (AQS ID: 06-071-0027). Please include this waiver approval with next year's network plan.

Please note that we cannot approve portions of the annual network plan for which the information in the plan is insufficient to judge whether the requirement has been met, or for which the information provided does not meet the requirements as specified in 40 CFR 58.10 and the associated appendices. EPA Region 9 also cannot approve portions of the plan for which the EPA Administrator has not delegated approval authority to the regional offices. The first enclosure (*A. Annual Monitoring Network Plan Checklist*) is the checklist EPA used to review your plan for items that are required to be included in the annual network plan along with our assessment of whether the plan submitted by your agency addresses those requirements. Items highlighted in yellow are those EPA Region 9 is not acting on, as we either lack the authority to approve the specific item, or we have determined that a requirement is either not met or information in the plan is insufficient to judge whether the requirement has been met. Items highlighted in green in enclosure A require attention in order to improve next year's plan.

All comments conveyed via this letter and enclosures should be addressed prior to submittal of next year's annual monitoring network plan to EPA.

If you have any questions regarding this letter or the enclosed comments, please feel free to contact me at (415) 947-4134 or Jennifer Williams at (213) 244-1824.

Sincerely,

Gwen Yoshimura, Manager Air Quality Analysis Office

#### Enclosures:

A. Annual Monitoring Network Plan Checklist

B. Approval of the SCAQMD Request for PM<sub>2.5</sub> FEM Waiver

cc (via email): Jason Low, SCAQMD

Andrea Polidori, SCAQMD
Rene Bermudez, SCAQMD
Jin Xu, California Air Resources Board (CARB)
Kathy Gill, CARB
Michael Miguel, CARB
Michael Werst, CARB
Sylvia Vanderspek, CARB
Webster Tasat, CARB

#### A. ANNUAL MONITORING NETWORK PLAN CHECKLIST

(Updated July 10, 2018)

Year: 2018

Agency: South Coast Air Quality Management District

40 CFR 58.10(a)(1) requires that each Annual Network Plan (ANP) shall provide for the documentation of the establishment and maintenance of an air quality surveillance system that consists of a network of SLAMS monitoring stations that can include FRM, FEM, and ARM monitors that are part of SLAMS, NCore, CSN, PAMS, and SPM stations.

40 CFR 58.10(a)(1) further directs that, "The plan shall include a statement of whether the operation of each monitor meets the requirements of appendices A, B, C, D, and E of this part, where applicable. The Regional Administrator may require additional information in support of this statement." On this basis, review of the ANPs is based on the requirements listed in 58.10 along with those in Appendices A, C, D, and E.

EPA Region 9 will not take action to approve or disapprove any item for which Part 58 grants approval authority to the Administrator rather than the Regional Administrators, but we will do a check to see if the required information is included and correct. The items requiring approval by the Administrator are: NCore, and Speciation (STN/CSN).

Please note that this checklist summarizes many of the requirements of 40 CFR Part 58, but does not substitute for those requirements, nor do its contents provide a binding determination of compliance with those requirements. The checklist is subject to revision in the future and we welcome comments on its contents and structure.

### Key:

White	meets the requirement
Yellow	requirement is not met, or information is insufficient to make a determination. Action requested in next year's plan or outside the ANP
	process.
Green	item requires attention in order to improve next year's plan.

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
GENE	RAL PLAN REQUIREMENTS				
1.	Submit plan by July 1 <sup>st</sup>	58.10 (a)(1)	Yes	Yes	Plan Submitted on June 28, 2018.
2.	30-day public comment / inspection period	58.10 (a)(1); 58.10 (c)	Yes Page 2	Yes	
3.	Statement of whether the operation of each monitor meets the requirements of appendices A, B, C, D, and E, where applicable	58.10 (a)(1)	Yes, Page 2	Yes	
4.	Modifications to SLAMS network – case when we are not approving system modifications	58.10 (a)(2); 58.10 (b)(5); 58.10 (e); 58.14	Yes Page 24-25	Insufficient to Judge	Several closure and relocations are noted and require additional information.
5.	Modifications to SLAMS network – case when we are approving system modifications per 58.14	58.10 (a)(2); 58.10 (b)(5); 58.10 (e); 58.14	N/A	N/A	
6.	Does plan include documentation (e.g., attached approval letter) for system modifications that have been approved since last ANP approval?		N/A	N/A	
7.	Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal	58.10 (b)(5)	Yes Page 24-25	Yes	
8.	Precision/Accuracy reports submitted to AQS	58.16 (a)	Yes Page 33	Yes	
9.	Annual data certification submitted	58.15	Yes Page 33	Yes	
10.	Statement that SPMs operating an FRM/FEM/ARM that meet Appendix E also meet either Appendix A or an approved alternative. Documentation for any Appendix A approved alternative should be included. <sup>5</sup>	58.11 (a)(2)	N/A	N/A	

Unless otherwise noted.
 Response options: NA (Not Applicable), Yes, No, or Incomplete.
 Assuming the information is correct.
 Response options: NA (Not Applicable) – [reason], Yes, No, Insufficient to Judge, or Incorrect
 Alternatives to the requirements of appendix A may be approved for an SPM site as part of the approval of the annual monitoring plan, or separately.

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
11.	SPMs operating FRM/FEM/ARM monitors for over 24 months are listed as comparable to the NAAQS or the agency provided documentation that requirements from Appendices A, C, or E were not met. <sup>6</sup>	58.20 (c)	N/A	N/A	
12.	For agencies that share monitoring responsibilities in an MSA/CSA: this agency meets full monitoring requirements or an agreement between the affected agencies and the EPA Regional Administrator is in place	App D 2(e)	N/A	N/A	
GENE	RAL PARTICULATE MONITORING REQUIREM	MENTS (PM <sub>10</sub> , 1	PM <sub>2.5</sub> , Pb-TSP, Pb-P	M <sub>10</sub> )	
13.	Designation of a primary monitor if there is more than one monitor for a pollutant at a site.	App. A 3.2.3	Yes Detailed Site Report	Incorrect in some instances	Fontana – Arrow Highway lists two primary PM <sub>2.5</sub> monitors. Based on other information in the table it is likely PM <sub>2.5</sub> POC 11 is incorrectly listed as "primary" and is a speciated PM <sub>2.5</sub> method.  Los Angeles – North Main Street lists one QA collocated Pb monitor and one as "N/A".
14.	Distance between QA collocated monitors. For low volume PM instruments (flow rate < 200 liters/minute) > 1 m. For high volume PM instruments (flow rate > 200 liters/minute) > 2m. [Note: waiver request or the date of previous waiver approval must be included if the distance deviates from requirement.]	App. A 3.2.3.4 (c) and 3.3.4.2 (c)	Yes Detailed Site Report	Yes	
PM <sub>2.5</sub> -	SPECIFIC MONITORING REQUIREMENTS				
15.	Document how states and local agencies provide for the review of changes to a PM <sub>2.5</sub> monitoring network that impact the location of a violating PM <sub>2.5</sub> monitor.	58.10 (c)	Yes Page 18	Yes	
16.		58.10 (b)(13) 58.11 (e)	Yes Appendix C	Yes	

<sup>&</sup>lt;sup>6</sup> This requirement only applies to monitors that are eligible for comparison to the NAAQS per 40 CFR §\$58.11(e) and 58.30.

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
	SLAMS must monitor PM <sub>2.5</sub> with <u>NAAQS</u> -comparable monitor at the required sample frequency.]				
17.	Minimum # of monitoring <b>sites</b> for PM <sub>2.5</sub> [Note 1: should be supported by MSA ID, MSA population, DV, # monitoring sites, and # required monitoring sites] [Note 2: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App. D 4.7.1(a) and Table D-5	Yes Page 27-28	Yes	
18.	(number of monitors and collocation)	App. D 4.7.2	Yes Page 27-28	Yes	
19.		App. A 3.2.3	Yes Page 32	Yes	
	PM <sub>2.5</sub> Chemical Speciation requirements for official STN sites	App. D 4.7.4	N/A	N/A	
21.	Identification of sites suitable and sites not suitable for comparison to the annual PM <sub>2.5</sub> NAAQS as described in Part 58.30	58.10 (b)(7)	N/A	N/A	
22.	Required PM <sub>2.5</sub> sites represent area-wide air quality	App. D 4.7.1(b)	Yes Page 6 Detailed Site Report	Yes	
23.	For PM <sub>2.5</sub> , within each MSA, at least one site at neighborhood or larger scale in an area of expected maximum concentration	App. D 4.7.1(b)(1)	Yes Page 6 Detailed Site Report	Yes	
24.	site in an area of poor air quality	App. D 4.7.1(b)(3)	Yes Pages 17-18	Yes	
25.	background and one PM <sub>2.5</sub> regional transport site.	App. D 4.7.3	N/A	N/A	
26.	Sampling schedule for PM <sub>2.5</sub> - applies to year-round and seasonal sampling schedules (note: date of waiver approval must be included if the sampling season deviates from requirement)	58.10 (b)(4); 58.12(d); App. D 4.7	Yes Page 2	Yes	The plan states that Big Bear was granted an exception at the inception of the program to operate a frequency of 1 in 6 days. Please provide the documentation that this sampling schedule was approved in next year's plan.
27.	Frequency of flow rate verification for automated and manual PM <sub>2.5</sub> monitors	App. A 3.2.1	Yes Detailed Site Tables	Yes	

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
28.	Dates of two semi-annual flow rate audits conducted in <b>CY2017</b> for PM <sub>2.5</sub> monitors [Note: 5 - 7 month interval is recommended but not a requirement.]	App. A 3.2.2	Yes Detailed Site Tables	Yes	Riverside Rubidoux semi-annual flow rate row has double printing, making it difficult to read the text.
PM <sub>10</sub> -5	SPECIFIC MONITORING REQUIREMENTS				
29.	Minimum # of monitoring sites for PM <sub>10</sub> [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App. D, 4.6 (a) and Table D-4	Yes Page 29	Yes	
30.	Manual PM <sub>10</sub> method collocation (note: continuous PM <sub>10</sub> does not have this requirement)	App. A 3.3.4	Yes Page 32	Yes	The text on page 10 states – "[w]here both 24-hour PM <sub>10</sub> FRM samplers and PM <sub>10</sub> FEM continuous analyzers are deployed together, they are sited as collocated for data comparison purposes where possible. FRM PM <sub>10</sub> sampler remains the primary analyzer used for attainment purposes and continuous analyzers are designated as audit samplers unless the primary 24-hour FRM PM <sub>10</sub> is offline then the continuous FEM analyzer data can be substituted."  Manual samplers can only be QA collocated with another manual sampler. If a continuous FEM is present at a site with a manual FRM, both data streams are comparable to the NAAQS independent of one another.
31.	Sampling schedule for PM <sub>10</sub>	58.10 (b)(4); 58.12(e); App. D 4.6	Yes Page 12	Insufficient to Judge	Sampling frequency requirements are not separated by FRM and FEM. In next year's plan, please include all PM <sub>10</sub> SLAMS in Table 6.
32.	Frequency of flow rate verification for automated and manual $PM_{10}$ monitors	App. A 3.3.1 and 3.3.2	Yes Detailed Site Tables	Yes	
33.	Dates of two semi-annual flow rate audits conducted in <b>CY2017</b> for PM <sub>10</sub> monitors [Note: 5 -7 month interval is recommended but not	App. A 3.3.3	Yes Detailed Site Tables	Yes	Anaheim – Loara School incorrectly lists a date of "11/047/2017."

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
	a requirement.]			<b>第</b> 是 4 经 1 年 2 年 2 年 2 年 2 年 2 年 2 年 2 年 2 年 2 年	
Pb -SP	ECIFIC MONITORING REQUIREMENTS				
34.	Minimum # of monitors for non-NCore Pb [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App D 4.5	Yes Page 32	Yes	
35.	Pb collocation: for non-NCore sites	App A 3.4.4 and 3.4.5	Yes Page 32	Yes	
36.	been granted by EPA Regional Administrator	58.10 (b)(10)	N/A	N/A	
37.	Any Pb monitor for which a waiver has been requested or granted by EPA Regional Administrator for use of Pb-PM <sub>10</sub> in lieu of Pb-TSP	58.10 (b)(11)	N/A	N/A	
38.	Designation of any Pb monitors as either source- oriented or non-source-oriented	58.10 (b)(9)	Yes Page 15	Yes	
39.	Sampling schedule for Pb	58.10 (b)(4); 58.12(b); App A 3.4.4.2 (c) and 3.4.5.3 (c)	Yes Page 15	Yes	
40.	Frequency of flow rate verification for Pb monitors audit	App A 3.4.1 and 3.4.2	Yes Detailed Sites Tables	Yes	
41.	Dates of two semi-annual flow rate audits conducted in <b>CY2017</b> for Pb monitors [Note: 5 -7 month interval is recommended but not a requirement.]	App A 3.4.3	Yes Detailed Sites Tables	Yes	
GENER	AL GASEOUS MONITORING REQUIREMENTS				
42.	Frequency of one-point QC check (gaseous)	App. A 3.1.1	Yes Detailed Site Tables	Yes	
43.	Date of Annual Performance Evaluation (gaseous) conducted in CY2017	App. A 3.1.2	Yes Detailed Site Tables	Yes	Mission Viejo CO and O <sub>3</sub> incorrectly list semi- annual flow rate audits for a PM monitor dated 03/29/2017.

. e	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes  Ontario Route 60 Near Road NO <sub>2</sub> incorrectly lists
					semi-annual flow rate audits for a PM monitor dated 11/16/2017.
44.	Minimum # of monitoring sites for O <sub>3</sub> [Note 1: should be supported by MSA ID, MSA population, DV, # monitoring sites, and # required monitoring sites] [Note 2: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.] [Note 3: monitors that do not meet traffic count/distance requirements to be neighborhood or urban scale (40 CFR Appendix E, Table E-1) cannot be counted towards meeting minimum monitoring requirements]	App D 4.1(a) and Table D-2	Yes Page 27	Yes	
45.	Identification of maximum concentration O <sub>3</sub> site(s)	App D 4.1 (b)	Yes Detailed Site Tables	Ye	
46.	Sampling season for O <sub>3</sub> (Note: Waivers must be renewed annually. EPA expects agencies to submit re-evaluations of the relevant data each year with the ANP. EPA will then respond as part of the ANP response.)	58.10 (b)(4); App D 4.1(i)	Yes Detailed Site Tables	Yes	
47.	A plan for making Photochemical Assessment Monitoring Stations (PAMS) measurements, if applicable. The plan shall provide for the required PAMS measurements to begin by June 1, 2019.	58.10 (a)(10)	Yes Appendix D	Yes	
NO <sub>2</sub> –S	PECIFIC MONITORING REQUIREMENTS				
48.	NO <sub>2</sub> monitor in location of expected highest NO <sub>2</sub> concentrations representing neighborhood or larger scale (operation required by 1/1/13)	App D 4.3.3	Yes Page 29	Yes	
49.	Minimum monitoring requirements for susceptible and vulnerable populations monitoring (aka RA40) NO <sub>2</sub> (operation required by January 1, 2013)	App D 4.3.4	Yes Page 29	Yes	
50.	Identification of required NO2 monitors as either	58.10 (b)(12)	Yes	Yes	

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
	near-road, area-wide, or vulnerable and susceptible population (aka RA40)		Page 22		
EAR R	ROADWAY – SPECIFIC MONITORING REQUIRE	MENTS			
	$As \ge 2.5$ million, the following near-roadway minimum		uirements apply:		
	Two NO <sub>2</sub> monitors	App. D 4.3.2(a); 58.13(c)(3) and (4)	Yes Page 29	Yes	
		App. D 4.2.1(a); 58.13(e)(2)	Yes Page 30	Yes	
	One PM <sub>2.5</sub> monitor	App. D 4.7.1(b)(2); 58.13(f)(2)	Yes Page 28	Yes	
	As $\geq 1$ million and AADT $\geq 250$ K, the following near-		<b>—</b>		
	Two NO <sub>2</sub> monitors	App. D 4.3.2(a); 58.13(c)(3) and (4)	N/A	N/A	
55.	One CO monitor (by 1/1/2017)	App. D 4.2.1(a); 58.13(e)(2)	N/A	N/A	
		App. D 4.7.1(b)(2); 58.13(f)(2)	N/A	N/A	
1 CBSA	As $\geq 1$ million and $\leq 2.5$ million <b>AND</b> AADT $< 250$ K,		ear-roadway minimum	monitoring requireme	nts apply:
	One NO <sub>2</sub> monitors	App. D 4.3.2(a); 58.13(c)(3)	N/A	N/A	
58.	One CO monitor (by 1/1/2017)	App. D 4.2.1(a); 58.13(e)(2)	N/A	N/A	
59.	One PM <sub>2.5</sub> monitor (by 1/1/2017)	App. D 4.7.1(b)(2); 58.13(f)(2)	N/A	N/A	

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
60.	Minimum monitoring requirements for SO <sub>2</sub> based on PWEI and/or RA required monitors under Appendix D 4.4.3 [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App D 4.4	Yes Page 13-14 Figure 5	Yes	
61.	Monitors used to meet Data Requirements Rule (operational no later than January 1, 2017.)	51.1203(c)	N/A	N/A	
CORE	E –SPECIFIC MONITORING REQUIREMENTS				
62.	year-round O <sub>3</sub> , SO <sub>2</sub> , CO, NO <sub>y</sub> , NO, PM <sub>2.5</sub> mass, PM <sub>2.5</sub> continuous, PM <sub>2.5</sub> speciation, PM <sub>10-2.5</sub> mass, resultant wind speed at 10m, resultant wind	App. D 3(b)	Yes Detailed Site Reports	Yes	
	direction at 10m, ambient temperature, relative humidity. NOy waiver, if applicable.		C77		
	humidity. NOy waiver, if applicable.  R MONITOR - SPECIFIC REQUIREMENTS (OFTE				
ΓΕ O 63.	humidity. NOy waiver, if applicable.  R MONITOR - SPECIFIC REQUIREMENTS (OFTE	N INCLUDED I 58.10 (b)(1)	N DETAILED SITE I  Yes Detailed Site Reports	NFORMATION TABI	
	humidity. NOy waiver, if applicable.  R MONITOR - SPECIFIC REQUIREMENTS (OFTE		Yes Detailed Site		AQS ID is listed as "unavailable" SA Recycling is the "Detailed Site Information" table but is
63.	humidity. NOy waiver, if applicable.  R MONITOR - SPECIFIC REQUIREMENTS (OFTE AQS site identification number for each site  Location of each site: street address and geographic	58.10 (b)(1) 58.10 (b)(2) 58.10 (b)(8)	Yes Detailed Site Reports Yes Detailed Site	Yes	AQS ID is listed as "unavailable" SA Recycling in the "Detailed Site Information" table but is
63.	humidity. NOy waiver, if applicable.  R MONITOR - SPECIFIC REQUIREMENTS (OFTE AQS site identification number for each site  Location of each site: street address and geographic coordinates  MSA, CBSA, CSA or other area represented by the	58.10 (b)(1) 58.10 (b)(2)	Yes Detailed Site Reports Yes Detailed Site Reports Yes Detailed Site Reports Yes Detailed Site	Yes	AQS ID is listed as "unavailable" SA Recycling in the "Detailed Site Information" table but is

68.	ANP requirement  Site type for each monitor	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.  Reports Yes Detailed Site	Does the information provided³ meet the requirement?⁴	Notes
60	Monitor type for each maniton and Nativerl	Needed to	Reports	Incompating	The following sites list a positive to a service by
69.	Monitor type for each monitor, and Network Affiliation(s) as appropriate	Needed to determine if other requirements (e.g., min # and collocation) are met	Yes Detailed Site Reports	Incorrect in some instances	The following sites list a monitor type or network affiliation that is not one of the acceptable options:  • Anaheim Near Road (monitor type) CO - Near Road  • AT&SF (network affiliation) Pb - Microscale Pb  • Azusa (network affiliation) metals, carbonyls, VOCs - CA Air Toxics  • Closet World Quemetco (network affiliation) Pb - Microscale Pb  • Compton (monitor type) Pb - SQA Collocated  • Indio (monitor type) PM <sub>10</sub> - /QA Collocated"  • 710 Near Road (monitor type) NO <sub>2</sub> , PM <sub>2.5</sub> , CO - Near Road  • LA North Main Street (monitor type) Various pollutants - Ncore/NATTS/QA Collocated/Pb  • LA North Main Street (network affiliation) various pollutants - QA Collocated/Pb/CA Air Toxics  • Mira Loma (monitor type) PM <sub>2.5</sub> - QA Collocated  • Rehrig (network affilitation) Pb - Microscale Pb  • Roverside - Rubidoux (network affiliation) Various pollutants - CA Air Toxics  • SA Recycling (network affilitation) Pb - Microscale Pb  • Uddeholm (network affilitation) Pb - Microscale Pb
70.	Scale of representativeness for each monitor as	58.10(b)(6);	Yes	Yes	Wichoscale 1 U
	Transmitter do	- 5.15(5)(5),			

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
	defined in Appendix D	App D	Detailed Site Reports		
71.	Parameter code for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	Yes Detailed Site Reports	Insufficient to judge	Parameter Code information is missing for the following sites:  • All pollutants (except PM <sub>2.5</sub> ) at Lake Elsinore.  • Pb, PM <sub>10</sub> at LAX - Hastings
72.	Method code and description (e.g., manufacturer & model) for each monitor	58.10 (b)(3); App C 2.4.1.2	Yes Detailed Site Reports	Incorrect in some instances	Method code 780 does not exist for PM <sub>2.5</sub> :  • Anaheim-Loara School  • Big Bear  • Compton  • Fontana Arrow Highway  • Indio Jackson  • South Long Beach  • Mission Viejo  • Palm Springs – Fire Station  • Pico Rivera  • Reseda
73.	Sampling start date for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	Yes Detailed Site Reports	Yes	Long Beach (Hudson) start date is listed as "1/10". Unclear if this is mean as January 2010 or if the year is missing since the convention is listed as "MM/DD/YYYY".
74.	Distance of monitor from nearest road	App E 6	Yes Detailed Site Reports		
75.	Traffic count of nearest road	App E	Yes Detailed Site Reports		

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
76.	Groundcover	App E 3(a)	Yes Site Survey Report	Yes	
77.	Probe height	App E 2	Yes Detailed Site Reports	Yes	Reseda PM <sub>2.5</sub> (continuous) probe height is 1.5 meters. Since this monitor has the waiver, it is not required, but suggest elevating to at least 2m to better compare with the manual FRM.
78.	Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	App E 2	Yes Detailed Site Reports	Not meeting requirement in some instances	The following PM2.5 monitors are not at least  1.8m (2m +/02m) from the supporting structure:  • Riverside- Rubidoux – PM <sub>2.5</sub> - 1.6m  • San Bernardino PM <sub>2.5</sub> - 1m  • Temecula PM <sub>2.5</sub> – 1m  • Upland PM <sub>2.5</sub> – 1.7m  Reseda – Distance to supporting structure (2m) is more than probe height (1.5).
79.	Distance from obstructions on roof (horizontal distance to the obstruction and vertical height of the obstruction above the probe should be provided)	App E 4(b)	Yes Detailed Site Reports	Yes	is more than probe neight (1.5).
80.	Distance from obstructions not on roof (horizontal distance to the obstruction and vertical height of the obstruction above the probe should be provided)	App E 4(a)	Yes Detailed Site Reports	Yes	
81.	Distance from the drip line of closest tree(s)	App E 5	Yes Detailed Site Reports	Not meeting requirement in one instance	Pasadena – 6m to tree
82.	Distance to furnace or incinerator flue	App E 3(b)	Yes Detailed Site Reports	Insufficient to judge	Pico Rivera – 4m to flue. No discussion is in predominant wind direction
83.	Unrestricted airflow (expressed as degrees around probe/inlet or percentage of monitoring path)	App E, 4(a) and 4(b)	Yes Detailed Site Reports	Insufficient to judge	Crestline – 225 degrees of unobstructed airflow
84.	Probe material (NO/NO <sub>2</sub> /NO <sub>y</sub> , SO <sub>2</sub> , O <sub>3</sub> ; For PAMS: VOCs, Carbonyls)	App E 9	Yes Detailed Site Reports	Yes	

	ANP requirement	Citation within 40 CFR 58 <sup>1</sup>	Was the information submitted? <sup>2</sup> If yes, section or page #s.	Does the information provided <sup>3</sup> meet the requirement? <sup>4</sup>	Notes
85.	Residence time (NO/NO <sub>2</sub> /NO <sub>y</sub> , SO <sub>2</sub> , O <sub>3</sub> ; For PAMS: VOCs, Carbonyls)	App E 9	Yes Detailed Site Reports	Yes	

# **Public Comments on Annual Network Plan**

Were comments submitted to the S/L/T agency during the public comment period?	No
Were comments included in ANP submittal?	N/A
Were any of the comments substantive? If yes, which ones? If comments were not substantive provide rationale.	N/A
Were S/L/T responses to substantive comments included in ANP submittal?	N/A
Were the S/L/T responses to substantive comments adequate?	N/A
Do the substantive comments require separate EPA response (i.e., agency response wasn't adequate)?	N/A
Are the sections of the annual network plan that received substantive comments approvable after consideration of comments? If yes, provide rationale	N/A

### B. Approval of the SCAQMD Request for PM2.5 FEM Waiver

In the South Coast Air Quality Management District (SCAQMD) 2018 Annual Air Quality Monitoring Network Plan, submitted June 28, 2018, SCAQMD requested EPA's approval to consider the 2015-2017 PM<sub>2.5</sub> data from the continuous federal equivalent method (FEM) monitors at the following sites as not eligible for comparison to the NAAQS: Anaheim (AQS ID: 06-059-0007-3), Central Los Angeles (AQS ID 06-037-1103-9), South Long Beach (AQS ID: 06-037-4004-3), Rubidoux (AQS ID: 06-065-8001-9), Mira Loma (AQS ID: 06-065-8005-3), Long Beach Route 710 (AQS ID: 06-037-4008-3), and Ontario Route 60 (AQS ID: 06-071-0027-3). This enclosure approves the monitors listed below for the specified dates as not eligible for comparison to the NAAQS (i.e., provides a waiver for NAAQS comparability).

According to 40 CFR 58.11(e), in order to be considered not eligible for comparison to the NAAQS, continuous FEM PM<sub>2.5</sub> data must be shown to not meet the criteria in 40 CFR 53 Table C-4. These criteria describe the maximum allowable multiplicative and additive bias between filter-based federal reference method (FRM) PM<sub>2.5</sub> monitor and a Class III continuous FEM PM<sub>2.5</sub> monitor operating at the same site. EPA based its evaluation on the criteria in 40 CFR 53 as described by our memo dated April 20, 2013 and its attached document titled, "Instructions and Template for Requesting that data from PM<sub>2.5</sub> Continuous FEMs are not compared to the NAAQS."

We reviewed your request for 2015-2017 data and have determined that the following monitors do not meet the bias criteria in 40 CFR 53 (see the attached "EPA Evaluation for the Request for Exclusion of PM<sub>2.5</sub> Continuous FEM Data" table) and are approved as not eligible for comparison to the NAAQS for the noted time periods:

Site Name	<b>AQS ID-Parameter Code-POC</b>	Begin Date	<b>End Date</b>	
Anaheim	06-059-0007-3	01/01/2015	12/31/2017	
Central Los Angeles	06-037-1103-9	01/01/2015	12/31/2017	
South Long Beach	06-037-4004-3	01/03/2015	12/31/2017	
Rubidoux	06-065-8001-9	01/01/2015	12/31/2017	
Mira Loma	06-065-8005-3	01/01/2015	12/31/2017	
Long Beach Route 710	06-037-4008-3	01/01/2016	12/31/2017	
Ontario Route 60	06-071-0027-3	08/01/2015	12/31/2017	

Your request stated that you consider the continuous PM<sub>2.5</sub> data of sufficient quality to report to the AQI, and will be submitting the data to AIRNow. As such, it is appropriate to submit the data from the monitors and dates in the table above to AQS under the parameter code 88502.

In providing the waiver for the data in the timeframes listed above, EPA expects that SCAQMD will continue to work to improve the comparability of the continuous PM<sub>2.5</sub> FEM monitors and their filter-based monitors. If SCAQMD intends to submit data from these monitors under a parameter code other than 88101, an updated analysis of the bias for each FEM monitor should be included in future annual network plans for a renewed waiver approval.

In addition, since the intent of such a waiver is to allow more time for method and operational

improvements to meet the required bias, SCAQMD must develop a performance assessment and improvement plan to be approved by EPA that describes how the agency will track the performance of these monitors on a quarterly or more frequent basis, as well as the activities SCAQMD intends to take to address any continuing performance issues.

# EPA Evaluation of the Request for Exclusion of PM2.5 Continuous FEM Data

## 2015-2017

Site Name	Site ID	Cont POC	Method Description	PM <sub>2.5</sub> Cont. Analysis Begin Date	PM <sub>2.5</sub> Cont Analysis End Date	Continuous/ FRM Sampler pairs per season	Slope (m)	Intercept (y)	Meets bias requirement	Correlation (r)
Sites with PM2	5 continuous FEM	Is that are	collocated with FR	Ms:						
Anaheim*	06-059-0007	3	Met-One BAM 1020 w/VSCC	01/01/2015	12/31/2017	Winter = 218 Spring = 266 Summer = 260 Fall = 178 Total = 922	1.09	2.77	No	0.93
Central Los Angeles*	06-037-1103	9	Met-One BAM 1020 w/VSCC	01/01/2015	12/31/2017	Winter = 222 Spring = 249 Summer = 248 Fall = 237 Total = 956	1.19	1.96	No	0.95
South Long Beach	06-037-4004	3	Met-One BAM 1020 w/VSCC	01/03/2015	12/31/2017	Winter = 242 Spring = 252 Summer = 258 Fall = 256 Total = 1008	1.14	1.50	No	0.94
Rubidoux*	06-065-8001	9	Met-One BAM 1020 w/VSCC	01/01/2015	12/31/2017	Winter = 243 Spring = 261 Summer = 261 Fall = 262 Total = 1027	1.01	2.13	No	0.92
Mira Loma*	06-065-8005	3	Met-One BAM 1020 w/VSCC	01/01/2015	12/31/2017	Winter = 236 Spring = 235 Summer = 243 Fall = 236 Total = 950	0.98	3.79	No	0.90
Long Beach Route 710	06-037-4008	3	Thermo BAM 5014i w/VSCC	01/01/2016	12/31/2017	Winter = 167 Spring = 156 Summer = 180 Fall = 171 Total = 674	0.96	2.80	No	0.92
Ontario Route 60	06-071-0027	3	Thermo BAM 5014i w/VSCC	08/01/2015	12/31/2017	Winter = 180 Spring = 164 Summer = 197 Fall = 230 Total = 771	0.90	3.52	No	0.88

<sup>\*</sup>The number of FRM/sampler pairs, slope, intercept, and/or correlation (r) differ slightly between this table and SCAQMD's request for some monitors, due to changes in the EPA  $PM_{2.5}$  Continuous Monitor Comparability Tool that were made between the preparation of SCAQMD's request and EPA's evaluation of the request. However, all of the listed monitors continue to not meet the bias requirement when evaluated with the new tool.